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ABSTRACT

The existence of a contextual effect of the social class composition of a school's intake on individual student performance--the school mix effect--has long been debated in qualitative school effectiveness literature. This paper reports on a qualitative study of four New Zealand urban secondary schools of varying social class composition (and ethnicity) designed to shed light on a school mix effect by examining possible causal mechanisms. One low-socioeconomic status school was compared with three middle-class schools. Evidence was found to support a whole-school explanation for a school mix effect stemming from the cumulative effects of reference groups, instructional practices, and organizational and management practices. Implications for research and policy are suggested. Addressing the effects of school mix effect should be part of the policy agenda for reducing educational inequity. (Contains 1 table, 2 figures, and 60 references.) (Author/SLD)

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The School Mix Effect: How the Social Class Composition of School Intakes Shapes School Processes and Student Achievement.

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A paper presented to the AERA 1997 Annual Meeting, March 24-28th, Chicago.

ABSTRACT

The existence of a contextual effect of the social class composition of a school's intake on individual student performance - the school mix effect - has long been debated in quantitative school effectiveness literature. This paper reports a qualitative study of four New Zealand schools of varying social class composition designed to shed light on a school mix effect by examining possible causal mechanisms. Evidence was found to support a whole school explanation for a school mix effect stemming from the cumulative effects of reference group, instructional and organisational/management processes. Implications for research and policy are suggested.

INTRODUCTION

In popular wisdom the social class composition of school intakes - 'school mix' - is often seen to play an important role in determining the academic success of individual pupils. As Jencks *et al.* (1972) observed, 'many people define a good school not as one with fancy facilities or highly paid teachers but as one with the "right" kinds of students', a view in which 'the quality of a school depends on its exclusiveness' (p. 29). However teachers and others who work in the education sector often reject the view that students will achieve better results by attending high socio-economic (high SES) schools rather than low socio-economic (low SES) schools. Their professional ideologies lead them to argue that effective school policies and practices rather than school mix 'add value' to student achievement. From this perspective any school at least holds the potential to be as good at promoting achievement as any other.

Yet what if school mix *does* have an important influence on student achievement? This issue goes to the heart of debate over 'choice' in education because many researchers have predicted that market policies will intensify socio-economic segregation amongst schools (Ball, 1993; Elliot and McClennan, 1994; Lauder, 1991; OECD, 1994; Sernau, 1993; Walford 1994). They argue that since working class and minority families are often not willing or able to exercise choice in the ways theorised by neo-liberals, children from these groups will be left behind in increasingly working class 'sink' schools as middle class families select more affluent school settings. Some evidence to support this claim is beginning to accumulate (Gerwitz *et al.*, 1995; Lauder *et al.*, 1995; Waslander and Thrupp, 1995; Whitty1996). The concern then is that, with increased segregation, existing disparities in student outcomes could also intensify if school mix does have an impact on student achievement.

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But whether or not market policies in education could influence student outcomes in this way is difficult to assess because the impact of school mix on student achievement has been an unresolved problem in quantitative school effectiveness research for more than three decades (Thrupp, 1995). Although the view that 'schools can make a difference' irrespective of school mix finds much support in the literature, research in this area has been so coloured by political, ideological and methodological issues that it is hard to establish what influence, if any, school mix might have. Recent findings tend to contradict one another. While some argue that school mix does have a significant influence on achievement (McPherson and Willms, 1987; Lauder and Hughes, 1990; Willms, 1992) others maintain that it does not (Thomas and Mortimore, 1994). Mortimore *et al.* (1994) describe the effects of school mix on achievement as an 'unresolved issue' in school effectiveness research.

Although interesting, debate over the significance or otherwise of school mix is in any case rather hollow because researchers haven't investigated how it might work. As McPherson and Willms (1987, p.23) note, the question of how school mix affects the educational performance of individual students is 'not well understood'. In one sense this is surprising because there are stubborn causal issues involved in quantitative research into the effects of school mix which mean that qualitative research could be seen as a more fruitful way forward (Thrupp, 1995). But it appears that the predilection of school effectiveness researchers for large-scale quantitative methodologies has led them to ignore the potential of detailed qualitative research. While some researchers have called for qualitative research into the effects of school mix (Campbell and Alexander, 1965; Erbring and Young, 1979; Clifford and Heath, 1984; Willms, 1985; Mortimore *et al.*, 1994), none have actually done any.

In an attempt to remedy this situation, I recently completed a qualitative study of four secondary schools in Wellington, New Zealand (Thrupp, 1996). In contrast to previous research, the Wellington study aimed to bring rich qualitative evidence to bear on the question of school mix. I spent a year collecting and comparing data across the schools during which, amongst other activities, I observed over 260 lessons, had 60 semi-structured interviews with students and teachers, compared samples of student work and attended numerous meetings and school events. As a result of this approach, while unable to be conclusive, the study does provide fresh evidence to support the thesis that school mix might have an important effect on achievement as well as some ideas about how a school mix effect could work.

This paper provides an overview of the study and notes some implications for research and policy. Detail is necessarily limited and readers requiring further particulars should refer to the thesis itself (Thrupp, 1996).

THE SCOPE AND METHODOLOGY OF THE WELLINGTON STUDY

The Wellington study aimed to examine possible causal mechanisms underpinning a school mix effect. Various mechanisms are suggested by an exchange between Dreeben and Barr (1988) and Hallinan (1988) as well as by research on the effects of 'tracking' (Gamoran and Berends, 1987; Oakes *et al.*

1992). One hypothesis is that school mix has an effect through reference group processes, ie. the attainment of a student might somehow be raised by informal contact with higher SES peers in middle class schools. A second is that school mix might have an effect through instructional processes because students are exposed to higher quality instruction in middle class schools. A third hypothesis is that organisational and management processes could be influenced by school mix so that middle class schools have more efficient or effective organisational and management processes. Finally a whole school effect could result from all of the above.

The Wellington study did not however set out to 'prove' or 'disprove' these hypotheses. Nor was it a value-added study, being more concerned with understanding processes than measuring outcomes. Rather, it aimed to indicate whether certain kinds of processes were found in schools with particular social class mixes. The concern then was whether these processes created conditions which could plausibly lay the foundations for explaining a school mix effect. For instance by investigating whether students in predominantly middle class schools have higher SES friends than those in more working class schools, it was possible to confirm or refute the possibility of a reference group explanation despite not being able to directly demonstrate the benefits to achievement that contact with higher SES students might bring. In a similar way, it was possible to work through the hypotheses and ask whether conditions existed for each hypothesis to be plausible as a cause of a school mix effect.

Within such complex social phenomena as schools it might be considered unlikely that any of the hypotheses would act alone: indeed as the 'whole school effect' hypothesis suggests, I thought it possible that several kinds of mechanisms could be involved. To take account of this, the research design for the Wellington study was wide-ranging. The chosen approach involved comparative and nested case studies of a group of matched working class students and the various reference group, instructional, organisational and management processes to which they were exposed in four schools with particular intake and organisational characteristics.

It was not enough to study schools with different mixes only because to do so would leave substantially unanswered the central issue of whether school policies and practices are influenced by mix or independent of it. To investigate this required a sample of schools of not only different but also similar composition. Table 1 shows some characteristics of the four schools which were selected.[1] Tui College was predominantly working class and ethnically diverse with large numbers of Maori and Pacific Island students. Wakefield, Victoria and Plimmer Colleges were all predominantly white middle class schools with Plimmer College having the highest mean SES. Victoria College was the only school to formally group students into classes by skimming off two 'high band'

[1] The figures here represent all students from third to sixth form in each of the schools in 1993, the year prior to the ordinary kids arriving at secondary level. SES data were collected from school records and electoral rolls and coded using the Elley-Irving scale. Here low SES, middle SES and high SES equate to Elley-Irving's 6 & 5, 4 & 3 and 2 & 1 respectively. School size has been rounded here to the nearest 50 students.

classes of 'able' students. Its inclusion allowed the study to explore the effect of within-school differentiation on the impact of school mix.

Table 1: Features of the Schools: SES, Ethnicity, Size

	School SES				Ethnicity (%)			
School:	%Low	%Mid	%High	Mean	Pakeha	Maori	Pacific Island	No. of students
Tui	44	51	5	4.62	40	39	20	550
Wakefield	11	68	21	2.92	76	12	3	600
Victoria	11	66	23	2.97	81	7	5	950
Plimmer	6	57	37	2.63	85	9	1	700

Figure 1: The Ordinary Kids by School and Class

TUI COLLEGE	Class 3T1: Class 3T2:	Tina, Teresa, Trudy, Terry Tony
WAKEFIELD COLLEGE	Class 3W1: Class 3W2:	Wendy, Winona Wilma
VICTORIA COLLEGE	Class 3V1: Class 3V2:	Vicky Vince
PLIMMER COLLEGE	Class 3P1: Class 3P2:	Penny Polly, Pauline

In each school, working class 'ordinary kids' (Brown, 1987) - students who neither accept nor reject school but comply with it so that they can 'get on' in working class terms - were selected to enable some comparison of the impact of school processes on student experiences/careers across the schools. Between two and five ordinary kids were selected in each school - a total of 13 (Fig. 1). They were matched on the basis of year level and SES, prior attainment and orientation characteristics. All were in their first year of secondary school - third form, aged 13 or 14 - and had SES ratings on the Elley Irving Index of 4.0-5.0 (Elley and Irving 1985). They were matched for prior attainment across several PAT tests in English and Maths and a number series test (Waslander *et al.*, 1994). The ordinary kids also had similarly positive orientations to schooling as indicated by an academic self-concept test (ibid). Although no attempt was made to match the ordinary kids in terms of ethnicity and gender, 10 of the 13 students were female and only Terry, a New Zealand born Samoan boy, was non-European/Pakeha.

Many data collection methods were also used across the schools to gain a broad view of the processes to which the ordinary kids were being exposed. These included group interviews with the ordinary kids and their friends, student questionnaires, teacher evaluations of students, classroom and school observations, interviews with teachers, teacher questionnaires, the collection of student work samples (which were independently evaluated by teachers) and interviews with Head of Departments, Deans, Guidance Counsellors and members of the schools' senior management teams (Assistant Principals, Deputy Principals, Principals). Information was also collected by perusing a wide range of school documents.

The study involved three levels of comparison. First, in order to identify common within-school reference group and instructional processes I compared the experiences of ordinary kids in two different teaching groups in each of the schools. Second, although I concentrated on English and Social Studies classes, an attempt was made to compare the ordinary kids across all their subject classes as recommended by Delamont and Galton (1986). The third level of comparison was among the schools in order to determine similarities and differences which might be related to school mix.

Finally, although only sometimes apparent here, a nested approach was used to structure the collection, analysis and presentation of data (after Barr and Dreeben, 1983). Unusual in qualitative research, a nested approach - the idea that schools have effects at hierarchical levels such as peer and learning groups, teaching classes, departments and schools as a whole - was used in this study because it was able to bring together data at different levels of each school to indicate patterns across each school. The key issue was whether evidence existed at different levels and whether it mostly pointed in similar rather that in conflicting directions. For example, if a common approach to curricula was found across classrooms, departments and a school as a whole, this would speak more powerfully to the causes of a school mix effect than if substantially different curricula approaches were discovered at various levels within a school.

SCHOOL MIX AND SCHOOL PROCESSES

This section of the paper summarises the main findings of the Wellington study. I often compare policies and practices at Tui College with those of the middle class schools (Victoria, Wakefield, Plimmer) which are generally treated as a group. I am not suggesting however that the middle class schools were entirely similar: indeed there were some important differences which are noted in places. Nevertheless it is essential to keep these variations in perspective: the middle class schools were much the same when compared to the scale of their differences to Tui College.

REFERENCE GROUP PROCESSES

The key reference group issue was whether attendance at a school with a large proportion of middle class students made it more likely that the ordinary kids' informal reference groups were middle class. While this may seem obvious,

several ethnographic studies from the US and UK have suggested there is little voluntary contact between working class and higher SES students in schools (Ball, 1981; Brantlinger, 1992; Lacey, 1970). Nevertheless although there was some evidence to support the view that the ordinary kids at the middle class schools 'stuck to their own' where possible, they did 'rub shoulders' with higher SES students. Overall, school mix appeared to be a more important influence on their informal reference group characteristics. The grand mean SES of the ordinary kids various informal reference groups at Tui College was 4.40, while at Wakefield and Victoria it was 3.27 and 3.35 respectively and at Plimmer College it was 2.49.[2]

The evidence suggests therefore that the higher the mean SES of the school, the more the ordinary kids *did* mix with middle class students, presumably exposing them more to middle class values, aspirations and knowledge. However, not all of the ordinary kids were equally comfortable in the student cultures of their schools. Those at Tui and Plimmer Colleges were generally on the social margins of their classes in terms of both their friendship groups and seat mates. At Tui College the ordinary kids were often seen as conforming 'geeks' who were at the respectable end of the 'rough-respectable' working class continuum within the school. At Plimmer College, they were 'uncool' compared to the school's generally 'able' middle class student body:

> Teacher: There's the 'cool' boys.... and the 'uncool' boys ... then there's the alternative 'cool' group (girls) ... and then there are the 'uncool' girls like (Penny and her friends) ...

By comparison, the ordinary kids at Wakefield and Victoria Colleges felt more accepted and acceptable among their peers. As Wendy put it, 'everyone here is just normal really'. Yet it would also be wrong to overemphasise the dislocation of the ordinary kids at Tui and Plimmer Colleges. They *did* find friends among others in their classes and they generally *did* get along with most other students. This was because although students were 'hassled' in the schools for any number of idiosyncratic reasons (a strange voice, a propensity to tears, a funny name), they were not usually 'picked on' for general social class or ethnic characteristics.

The study pointed to a range of reference group advantages which may have accrued to the ordinary kids at the middle class schools. These included being exposed to a student body with a wider range of curriculum-relevant experiences, higher levels of prior attainment, more experience of school success and more regular school attendance. The ordinary kids' peers at these schools also had higher academic goals and higher SES occupational aspirations and expectations which may have 'rubbed off' on the ordinary kids:

> Vicky: Me and Friend 1 want to be marine biologists ... I've been reading this book and this girl ...

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[2] Mostly the ordinary kids mixed with other students in their teaching classes although Terry, Vince and Polly all had large numbers of friends in other classes. At Plimmer, the grand mean SES is so high because the ordinary kids there tended to have close friendships with one or two other students in their teaching classes who, although high SES (1 or 2), were also on the social margins of their class.

> Friend 1: It's my book Vicky.
> Vicky: ... this girl saves a baby seal and then she wants to be a marine biologist and I thought 'oh yeah, that's quite good' and then I'm walking home with Friend 1 and she says 'I want to be a marine biologist' and I thought you see, I (had) wanted to be an interior decorator and I (thought), a marine biologist, that would be pretty choice.

The ordinary kids attending Tui College were also much more exposed to alienated 'Homey' and 'Metaller' subcultures which were a dominant feature of the social landscape. Some of the ordinary kids there were attracted to these groups:

> MPT (term three): So what else has happened since I last talked to you?
> Tina: And I hang around down by the bank, it's really cool, that's where heaps happens, yes, well, everybody smokes and that.....
> Friend 2: We used to hate going down to the bank but after a while you get hooked on it ...
> Tina: You know everyone.
> Friend 2: And it's really fun.
> Tina: And there was this guy who told me I look like a good rooter. And I went 'yes, well' ... (others laugh) ... I felt really cool eh.
> MPT: So what are they like down there?
> Friend 2: They are cool.
> Friend 3: They are rude.
> Friend 2: They are Metallers, they all wear tight jeans. They're mostly fifths. There is kind of a war going on at the moment between the Homeys and the Metallers. The Metallers kind of hate the Homeys ...

Tina's involvement in the 'Bank' Metaller group appeared to have little effect on her schoolwork but Trudy left school six weeks before the end of the school year when she came into conflict with her own (different) Metaller group:

> Trudy's Friend 1: They don't like Homeys who wear 'Origins', right, and she (Trudy) goes '(Friend 2), you can't come down to the beach if you are going to wear 'Origins' otherwise * (a Metaller) will give you the bash'.
> Friend 2: And I go (makes a face) 'oh ok'. My (Homey) friends heard about it and they were going to beat up * and he got a hiding. And so the Metallers then blamed Trudy and now she is going to get a hiding.

At the middle class schools these groups were also present but small, apparently because there were too many pro-school students to provide much support. Thus student cultures in the schools appeared to reflect the characteristics of the dominant student group/s in each school. It seems likely that a critical mass of alienated working class students is necessary to support the kinds of subcultures evidenced at Tui College.

Overall, the evidence from the four schools suggests that reference group processes could underpin a school mix effect. It appears that informal student reference groups necessarily represent a selection from the available student body. If these vary, so too will informal reference groups. The ordinary kids in the

middle class schools would have been hard pressed to find working class peers had they wanted to; at Tui College there was little other choice.

INSTRUCTIONAL PROCESSES

There were two aspects to the question of whether or not school mix affected the nature and quality of instructional processes. First, there was the issue of whether the nature and quality of instruction did vary between the schools, and, second, if this were the case, whether or not this was caused by school mix. A useful way to engage with the first issue was to consider the pattern of academic difficulty and student engagement found in classrooms across the schools. Figure 2 represents a global assessment of the ordinary kids classes in each school along these lines.[3] The letters T, V, W and P each indicate one of 56 different subject classes attended by the ordinary kids at Tui, Victoria, Wakefield and Plimmer colleges respectively.

Figure 2: Engagement/Difficulty Assessments across the Schools

		ACADEMIC DIFFICULTY			
		very low	low	high	very high
STUDENT ENGAGEMENT	very low	TTT	VWP		
	low		TTTT WPP	VWW PPPPP	P
	high	TTT VV	VVV	VVWW WPP	W PP
	very high	T	T WWWPP	WW	VVVV WW

Two trends emerge from the data. The first is a substantial variation in academic difficulty and student engagement *within* each of the schools. Even for the same group of students there was a considerable difference between subject classes in terms of the instructional conditions the ordinary kids experienced. For instance Wendy's Social Studies class was characterised by students working hard on demanding tasks with tight deadlines but in her English class, students 'mucked around', were provided with relatively simple tasks and had completely elastic

[3] Here student engagement relates to the extent to which students appear to be committed to classwork taking into account the following factors: the tone/ethos/climate of expectation/intensity of the classroom; the amount and type of on-task/off-task behaviour (including homework as appropriate); the amount and type of misbehaviour, and the amount and type of independent student questioning. Academic difficulty here refers to the extent to which lessons appeared to be more or less academically demanding. Factors considered were: the amount of time spent by the class on activities related to the formal curriculum; the pace and complexity of tasks related to the formal curriculum including listening to teacher talk, answering questions and discussion tasks, the use of texts and other resources, written tasks and assessment tasks.

deadlines. Victor and his friends were spectacularly off-task in some of their classes - using homemade flamethrowers made from aerosol cans and cigarette lighters to scorch the walls of their classroom, yelling and swearing at their teachers and even tying one of them to her chair! But in other classes they worked diligently. Similar variations between subject classes were observed across all the schools:

> Tui College teacher aide: Would you believe this is the same class as in Integrated Studies?

The second trend to note, however, is that, despite this variation, Tui College classes were more likely to be characterised by lower academic difficulty and lower student engagement than the middle class schools. The middle class schools all had some very high difficulty and/or very highly engaged classes whereas subject classes at Tui College were rarely characterised by either and never by both. This finding raises the question whether the difference was caused by instructional processes *independent* of school mix, or whether it *reflected* school mix. The evidence from this study suggested the latter - that course offerings, classroom discipline, teaching approaches, curriculum content, assessment, teaching resources and teacher characteristics may all be diverse within schools but that this diversity is nevertheless bounded by school mix.

Course offerings

Although the course offerings across the four schools at third form level were fairly similar, differences in curricula between Tui College and the middle class schools became considerable in the senior school. At the middle class schools, most seniors were university-bound and took a full academic programme. Only a small range of vocational 'transition' courses were offered. Student and parent demand largely dictated this balance:

> Victoria College Principal: Well in large measure it comes back simply to the choices that students want.... I mean for a school this size to have (so many) seventh form Maths with Statistics, and Maths with Calculus classes gives you an indication of where people put their priorities...

> Victoria College transition teacher: The community drives the school towards academics, the staff have bought into that, it's like barrowing cement up hill to (get transition classes established). The 'tail' is not attended to.

By comparison, at Tui College, many students wanted to take transition subjects rather than fail academic courses. Transition courses therefore made up almost half the senior curriculum. Student preference for transition subjects was forcing the school to reduce its senior level academic offerings as courses became non-viable. Low student demand and lack of prerequisites - these were minimal - made many academic courses unfeasible.

A further difference was in the instructional emphases of the schools. Although all ostensibly catered for a wide range of student characteristics through 'Special

Needs' departments or other programmes, the emphasis of the middle class schools was mostly on extending 'middle-ability' and 'able' students while Tui College put nearly all of its energies into initiatives for 'slow learners'.

> Tui College teacher: I suppose your middle and your bright kids are expected to get on with it ... it's an issue of staff time, they haven't got the time or energy to give up X number of hours to help a relatively small number of kids, they have basically got their hands full.

A much wider range of extra-curricular activities was also offered at the middle class schools. This did not appear to be so much because of greater staff support at those schools but because a wider range of activities found support among their student bodies, making them viable school offerings.

Classroom discipline

Less disciplinary action was required at the middle class schools than at Tui College. A higher proportion of students at the middle class schools appeared intrinsically interested in the lessons than was the case at Tui College. For instance they told one another to be quiet if they noticed the teacher waiting for silence or if they couldn't hear. Teachers sometimes overtly tapped into this enthusiasm:

> Wakefield College teacher: Shall I explain? You are probably itching to start.

Teachers could more easily draw on the instrumental value of what was being done by tapping into the desire of middle class students to succeed academically. Moreover if a teacher at one of the middle class schools threatened a class with a sanction such as a detention, this was usually enough to settle the class and it was often not necessary to follow the action through. At Tui College on the other hand, threats of detentions or similar sanctions had relatively little effect on most classes. If carried through, many students would simply not turn up.

Part of the reason disciplinary efforts were more successful at the middle class schools was that teachers appeared to carry more moral authority with students there. For instance most teachers at the middle class schools could, if necessary, shock classes into complete silence by yelling at them. Students' fear of the authority of teachers in the middle class schools was probably reinforced by the expectations of middle class parents who invariably supported these schools in their disciplinary efforts. But more than this, there was also evidence that teacher strictness was understood by most students in the middle class schools. Their comments suggested that they were better able to make a distinction between teachers as people and their roles in the classroom than Tui College students:

> Penny's Friend 3: She (Social Studies teacher) makes you do work but she is really nice. If she wasn't a teacher she would be a really nice person but of course she is a teacher so she has to be strict.

Their ability to do this was perhaps strengthened by knowing teachers out of school and mixing with their children; this was rarely the case for Tui College students.

Like student subcultures, teacher-pupil relations across the schools need to be seen as a matter of critical mass. Even in the middle class schools there were some students who didn't understand or accept the disciplinary 'game', just as Tui College had some who did. However where numbers of non-compliant students are small, it is easy for teachers and senior management to concentrate their energies on those students, whereas this is more difficult, perhaps impossible, in a situation of more widespread non-compliance. For instance, while teachers at the middle class schools frequently used disciplinary strategies which involved isolating misbehaving students and making them look foolish among their peers, these were rarely used at Tui College. There student allegiances were more powerful so that attempts to embarrass individuals would often result in a group of students uniting against the teacher.

Teaching approaches

The amount and type of classroom discussion and questioning varied considerably across the schools. Teachers at the middle class schools tended to ask numerous questions and to receive a lot of substantive and knowledgeable answers. The many student contributions received by teachers at the middle class schools were advantageous in a variety of ways. They could be used to build a discussion to a summary position and the responses of more 'able' students could also be used to correct less 'able' peers. Teachers could be demanding of classes and hold out for quality answers. Spontaneous student questions could be used by teachers as a spur to further discussion, or acted as reminders of points to cover. Knowledgeable student contributions meant that teachers didn't have to be 'fountains of all knowledge' - classroom relations could be more reciprocal.

At Tui College, by comparison, teacher questions and comments often met with silence. Teacher jokes usually fell flat because they didn't connect with the sharp, but quite different sense of humour students demonstrated. Even where teachers had encouraged a supportive atmosphere where students would speak out, answers were much less likely to be 'correct enough' to use to continue the discussion/questioning sequence. Teachers at this school had to be grateful for any answers and could not afford to 'hold out' too long because students quickly tired of the questioning game. Perhaps because it was difficult to get 'useful' responses, teachers also asked fewer questions at Tui College than at the middle class schools.

As a result of the generally higher level of student understanding and compliance, teachers in the middle class schools were also able to talk and question classes for much longer periods of time, in some cases most of a lesson. At Wakefield College, for instance, I observed Wilma's Social Studies teacher 'lecture' for 25 minutes on the importance of the coconut in Pacific Island societies. Wendy's Japanese teacher run a whole-class discussion for 45 minutes supported mostly by independent student questions. In contrast, talking to or questioning a class at length at Tui College was to invite disaster as students

became noisy and restless. 'Successful' teachers in this environment kept their whole-class talk 'short and sweet' before giving students a written task. Tasks were also introduced by Tui College teachers much more carefully and specifically with little left to chance:

> Teacher: Now I need you all to listen carefully. That means you can't be concentrating on whether the NZ cricket team will win or what you are going to have for lunch. You need to be either reading or listening or both. Ok, is everyone listening now? Has everyone got their books? Ok let's go ...

In some instances a whole raft of approaches were used to get the message across. Instructions were given orally, then re-emphasised and then checked with a 'guinea pig' in the class ('Now what do you have to do?'), then written on the blackboard. Such instructions were further reinforced by teacher checks on whether they were being followed, for instance by the teacher rapidly moving around the room to see that students *had* got their books out. By comparison, at the middle class schools the pace of directions was often rapid and relatively 'thin' with the apparent assumption that students would use prior experience and their 'ability'.

A related difference between Tui College and the middle class schools was the size of written tasks assigned to students. At Tui College, many students could not make much progress independently of teacher assistance so teachers learned to 'feed' the curriculum to students by breaking it down into small tasks which could be easily completed. By comparison, the use of extensive assignment work, often of several weeks duration, was more common at the middle class schools because students there were mostly 'able' and compliant enough to work independently for long periods of time.

Curriculum content

In order to gain independent assessments of the curriculum being covered in classes across the schools, groups of teachers at each of the schools were invited to participate in 'blind' evaluations of English and Social Studies student work samples from the other schools. Their responses suggest that curriculum content at the middle class schools was more demanding than at Tui College. In general, while the teachers at the middle class schools commented that the work done at Tui College involved a range of high interest activities and indicated attractive and varied presentation of work, they also remarked that lesson content was 'thin' or 'shallow' and expressed doubts about whether it met syllabus requirements. They also commented that the samples suggested a lack of critical analysis, a narrow range of subject specific skills, and little marking of student work.

Teachers at Tui College emphasised quite different strengths and weaknesses when commenting on the work samples from the middle class schools. They praised the depth and comprehensiveness of the work, the scope for expression of student ideas and values, and the amount of marking done in some classes. However they frequently commented that the work indicated 'conservative', 'traditional', 'prescriptive' and 'boring' classes which were too 'content driven',

'textbook orientated', or 'bookish'. Tasks were often seen to require too much recall of content, lacked 'graphic transformations' through diagrams and were 'unnecessarily wordy'.

These differences in responses suggest that teachers in the middle class schools and Tui College had different sets of curriculum priorities and goals. Central to this were their differing emphases on 'content' and 'skills' which they tended to pit against each other. While the teachers at the middle class schools usually felt that teaching curriculum content was very important, teachers at Tui College typically argued that if students had the literacy/study skills needed to access content, they could pick content up 'any time'. So while the general assumption at the middle class schools was that students were already reasonably literate and needed knowledge and ideas for examinations, at Tui College the possession of such skills was usually not assumed; instead it was often believed curriculum content would fall into place if students could get these 'basic' skills.

This difference in emphasis appeared be driven to a large extent by the nature of the student body of each school. Students at the middle class schools mostly thrived on new knowledge and concepts and would complain if work was insufficiently demanding. However this was less the case at Tui College where teachers argued that drumming a lot of content into students was pointless if they didn't have the literacy skills to understand it. They argued that, if pushed to complete this kind of work, Tui College classes would resist and misbehave.

> More independent, on-task, self-motivated behaviour (would be) required.

> The bookish nature of it would make most kids here spin out.

These differences in the taught curricula between the schools were further reflected in departmental policies and practices. Management documents of the middle class schools' English and Social Studies departments were more demanding and specific than at Tui College. The middle class schools also tended to use many more class sets of textbooks because teachers and HODs believed most students could cope with quite difficult texts if they were interested in the material being covered. On the other hand, Tui College departments found textbooks of limited use and leaned more on teacher made or modified resources.

Assessment

Assessment records indicated that more formal assessment was being done at the middle class schools. As well, little student work at Tui College was marked, perhaps because there was little parental or student pressure to do so. Most of the teachers in the middle class schools however did a lot of day-to-day marking and clearly saw this as an important part of their job.

A greater emphasis on assessment at the middle class schools could also be seen at the department and school level. Although Tui and Plimmer Colleges did not have junior examinations, these were a feature of most subjects at Wakefield and Victoria Colleges. Tui College reported to parents on a range of basic classroom behaviours (such as bringing books to school or being ready to start lessons)

which were not reported at the middle class schools. Tui College reports allowed no room for individual teacher comments. When summary comments were provided, they tended to be fairly neutral and emphasise the chance to improve in future:

> * has reached a pass in only two subjects ... His other grades are fair. He will have to build a wide variety of skills next year. Absences will have contributed to a lack of task and homework completion but he does show interest in all subjects. A big effort is needed (next year).

The reports generally avoided the more frank judgements of individual subject teachers in reports at the middle class schools:

> * does not stay on task and so he rarely completes his work. Homework is also often missed and so he gets further behind. When these matters are brought to his attention he becomes defensive and will not accept the responsibility for his own learning.

Classroom resources

Most of the students at the middle class schools had their own personal classroom resources such as paper, pens and rulers. In contrast, the start of lessons at Tui College was often characterised by students 'hunting' for these items from their classmates. Teachers at the middle class schools were also generally able to assume their students had access at home to a telephone and newspaper and often a computer but this was not the case at Tui College. Some subject classes in the middle class schools also used prepared workbooks which students were expected to buy. On the other hand, Tui College the school had to itself provide 'homework diaries' for its students because this was the only way to ensure all had what was considered a basic resource.

But apart from these personal resources, there was little evidence of substantial disparities in the supply of basic texts and written instructional resources among the schools. Indeed teachers at Tui College seemed to have a more generous photocopying budget than at any of the middle class schools. (This was entirely appropriate - although the school had plenty of textbooks, few could be used directly). Tui College did however suffer a greater loss of textbooks and other materials through student disorganisation and theft. Consequently students had less access to textbooks because they were rarely allowed to take them home.

The middle class schools were predictably much better equipped with video cameras, computers and musical instruments. Especially in computing where government funding was not available, community-based funds made a considerable difference.

Teacher characteristics

Teacher characteristics differed somewhat among the schools. Teachers at the middle class schools had higher SES backgrounds and were better qualified, particularly at Plimmer College. There was little difference in the mean number

of years of teaching experience, but teachers at the middle class schools were less likely to have previously taught at primary level and more likely to have previously taught at higher SES schools than was the case at Tui College. Staff morale seemed lowest at Tui College, with numerous staff looking for other jobs or applying for study leave:

> Teacher: I was at Teachers' College the other day with (another teacher) and we were talking about school and we realised we were talking about basically a slum school. It sounds awful, but that is what I think we have become. I want to get out, get some study leave or something.

Teacher morale was affected by the nature of the teachers' workloads. Although it was doubtful that Tui teachers were working harder than teachers elsewhere, they saw less progress for their efforts because they operated in a context where they were almost always overwhelmed by student learning and pastoral needs. This meant that even the programmes in which the school had strengths may not have been as well delivered as those in the middle class schools. For instance, despite the evident emphasis on the needs of the less able at Tui College, the Special Needs staff in the middle class schools were under less pressure and thus able to spend more time with struggling students. They worked with students who would not have been even considered of much concern at Tui College.

It also seemed likely that teachers at Tui College felt much less effective because they were not able to see a lot of reward for their efforts in terms of examination passes. While they could take comfort in the idea of value-added achievement or successes in sport or cultural performance activities, this, after all, is not the way society at large views school success and failure. Teacher comments suggested that the constant failure of students was depressing. Teachers at Tui College were generally less positive about the quality of their school than teachers at the middle class schools. Whereas the latter often had concerns about aspects of school organisation and their own conditions of work, they were invariably confident that students at their schools received a good deal. Staff at Tui College had less confidence about this and in some cases were very critical of what their school offered.

The classroom in context

Overall, teachers at Tui College appeared to be responding to the needs of mainly less 'able' and less compliant working class students with often carefully structured but sometimes not very successful instructional processes which were necessarily relatively undemanding. The result was that the ordinary kids there were being 'cooled out' by not being exposed to a more rigorous academic curriculum. As one Tui College teacher put it: 'teachers here are too busy lifting the 40% students to 50% to worry about lifting the 60% to 80%.'

At Wakefield and Victoria colleges on the other hand, the ordinary kids were attending schools which were mainly middle class but where working class students also constituted a significant group within the school which could not be ignored. The predominance of 'able' and compliant pupils allowed these schools to teach a more demanding curriculum, but only within the supporting

framework of tightly organised instructional processes that ensured all students, not just the most able, were being pushed towards the academic curriculum. As a result, the ordinary kids in these schools were better supported in their academic progress than at Tui College.

Finally, at Plimmer College, instructional processes seemed to largely rest on, and cater for, middle class students. The curriculum was therefore relatively demanding. The ordinary kids at Plimmer did not 'fit the mould' and did not get as much assistance as those at Wakefield and Victoria colleges. This was because teachers were responding to the evident demands of more 'able' students.

What constituted a 'successful' teacher also appeared to vary in the different school contexts. At Tui College, the most successful teachers were 'trainers' who took a highly structured role which could create controlled classroom environments where learning, albeit at a relatively low academic level, could take place. To take a more directly curriculum-oriented approach without putting sufficient emphasis on class control and organisation led to classes that were at best unfocussed, at worst chaotic. In complete contrast, at Plimmer College, the most successful teachers were those who took a 'low key' role by providing the necessary stimulus material or discussion starters that allowed students to learn independently. Almost all teachers at this school were 'facilitators' who had fairly flexible programmes; student choice and creativity through projects and assignments was encouraged.

Successful teacners at Victoria and Wakefield colleges lay somewhere between the Tui-Plimmer extremes but somewhat closer to Plimmer College. At these schools successful teachers tended to be classic 'talk and chalk' teachers rather than 'trainers' or 'facilitators'. With their relatively mixed clientele, structure and routine were more important and valued here than at Plimmer College but not as much as at Tui College. This allowed Wakefield and Victoria College teachers to give much more formal academic instruction than at either Tui or Plimmer colleges as well as incorporating aspects of both of their approaches at times.

However whereas 'good' teachers at any of the middle class schools could probably have taught at any of the other middle class schools with relatively little effort, they would have had more problems at Tui College where the disjunction between the academic curriculum and working class students was far greater. For instance, as several Tui College teachers emphasised, it was not feasible to focus on teaching an academic curriculum when student pastoral needs were so pressing. Nor was it possible to expect classes with large numbers of students with low prior achievement to work concertedly towards academic examinations. Teachers at Tui College needed to praise students for making personal progress even though this was sometimes minimal. The expectations, priorities, strategies and goals of Tui College teachers were inevitably different from those of their colleagues in the middle class schools.

ORGANISATIONAL AND MANAGEMENT PROCESSES

Daily routines

> Tui College Deputy Principal: This school is, the analogy I use is, do you know about Sisyphus' rock that he rolls up the hill? It's in *The Odyssey* somewhere. This school is like that, it makes it hard to teach here. As soon as you take your shoulder off something it goes backwards. You don't ever get to the stage here where you can say that it is in place. It's because the value system you are pushing doesn't sit naturally with the kids - you are trying to impose those values on them ... Almost anything you put in place, as soon as you stop monitoring it, reviewing it, putting the pressure on, it falls away.

Daily routines *were* much harder to establish and retain at Tui College than at the middle class schools. This school was putting much more energy into enforcing basic routines. For instance, the management team devoted considerable time and resources to working out ways to enforce attendance. The Principal also went around the school to speak to students about homework and organised surveys to see how much homework was being set by teachers and done by students. By comparison, widespread staff and student compliance with such day to day routines could be more or less taken for granted by the senior staff of the middle class schools. One got the sense that if a concern developed, an additional reminder to staff or students, rather than a systematic campaign, would be all that was required.

The management team at Tui College worked hard but was usually unable to maintain such demanding school policies and practices as those at the middle class schools. For instance, the rate of student absenteeism at Tui College was almost twice that of the middle class schools. Moreover, in some areas, the school appeared to have given ground to students by developing policies that were easier to enforce. Whereas students in the middle class schools were given homework whenever their teachers wanted to set it, Tui College allowed subject teachers to give homework only on one specified night a week. This prevented students getting too much homework on any one night and made policing of the homework rules easier. Penalties for handing in work for assessment late were also less severe at Tui College and students were given more time out of class to practice for cultural and sporting events.

Pressure to dilute school policies probably resulted not only from student non-compliance but from the attitudes of 'front line' teachers who were unwilling or unable to enforce daily routines in the face of student apathy or blatant non-compliance. Teachers had to pick their confrontations in a tough teaching environment and it is likely that, for many, issues such as homework and attendance monitoring were perceived as largely unwinnable and therefore not worth putting energy into. Conversely, there was some evidence that the 'tighter' routines at the middle class schools were sanctioned by teachers there. For instance Victoria College teachers often complained vigorously if they couldn't deliver the curriculum because students were out of class on extracurricular activities. Here extracurricular activities were seen as very much secondary to the

academic curriculum whereas at Tui College they were considered to be 'co-curricular' activities making it harder for teachers at Tui College to protest about students being out of class.

Guidance and discipline

One of the main points of variation across the schools was in the size and nature of the pastoral problems they faced. For instance Tui College suspended many more students than the middle class schools; in 1994 13% of Tui College's third formers were suspended compared with less than 3% at any of the other schools. It might be argued that this was because Tui College was suspending students more readily. However the evidence suggested this was *not* the case. Rather, Tui College had a plethora of students presenting serious problems.

> Deputy Principal: Let's take Student A, who one month pinches some stuff in a pretty organised fashion, is suspended, comes back and in the space of two weeks manages to systematically rob two other staff members, their wallets, keys and so on. A practiced criminal. Or Student B, a girl who is totally out of control at home, sleeps rough in (the city), heavily into crime, Mum's been arrested, she's got a drug and alcohol problem, a father who is trying to claim custody but there's some sexual abuse history in the background, that sort of situation. That student, suspended for violence, back in school, picked up smoking hash. What do we do with that kid? There have been meetings with Social Welfare, Justice are involved but finally there is no place for that kid at school....

The sheer scale of guidance problems at Tui College had three important effects. First, student problems were not as thoroughly addressed and properly followed through at Tui College as at the middle class schools. Second, Tui College teachers had comparatively little support from the school in dealing with everyday disciplinary issues. Third, the size of Tui College's pastoral role meant there was considerable tension between addressing the academic needs of students and meeting their pastoral needs. Teachers could not ignore students' pastoral needs because many were, as one teacher noted, 'a long way back from sitting in a classroom saying "ok, let's get on with it, this is the role I play here"'. As a result pastoral matters had become a major focus of the school, taking time and resources away from the formal curriculum and classroom teaching. This tension also existed to some degree in the middle class schools, but not to the same extent.

Each of the schools appeared to have developed particular pastoral ideologies as responses to the problems presented by their own student body. For example, Tui College took what might be regarded as a *devolved semi-counselling approach* to pastoral matters. The school had large numbers of students with serious pastoral and learning needs. Staff were generally forced to recognise these issues and in this respect many took what Johnson *et al.* (1994) would probably call a 'socially critical' orientation to pastoral issues. That is, they realised students were not simply being 'naughty', rather that there was 'the impact of situational factors on student behaviour' (Johnson *et al.*, p. 272) so it was necessary to be more flexible.

There was, in any case, little point in taking a disciplinary approach based on punishment at Tui College because such a confrontational strategy often didn't work with students in the absence of middle class parental support. Instead it was necessary to counsel students at length despite this being an 'exhausting process'. However the sheer scale of pastoral problems meant pastoral management had to be devolved to House Heads and form teachers to avoid swamping the senior staff. This had the effect that 'problem' students who might elsewhere have been immediately suspended won reprieves while the school tried various approaches to 'fix' their problems. But this approach made more work for teachers who in the meantime had to tolerate persistent non-compliance from such students.

By comparison, Wakefield and Victoria colleges took more *centralised, disciplinary approaches* to pastoral care, having fewer students with serious problems in or out of school. In most instances Wakefield and Victoria College students were viewed by their schools as misbehaving rather than having more serious problems. These schools took traditional approaches to school discipline. With strong parental support, they were able to be relatively intolerant of student non-compliance. Both schools had strong hierarchical disciplinary systems which coped well with individuals or groups; non-compliant students were quickly brought to the attention of the senior management and suspension followed if they didn't conform. Moreover, because the numbers of such students were manageable, senior staff had the time and energy to personally intervene.

Finally, Plimmer College had developed a *mixed semi-counselling approach* to pastoral care. Students here were counselled to take responsibility for their own behaviour in a way that was perhaps closest to Johnson's (1994) 'liberal progressive' orientation to school discipline. Again, this highly individualised approach was possible only because numbers of offending students were small and perhaps also because staff were often dealing with students from liberal, well-educated families who may have expected a reasoned, counselling approach rather than straight punishment. Although classroom teachers were expected to deal with ordinary infractions, they often sent misbehaving students directly to senior management.

Staff relations

Staff relations also appeared to differ across the schools in ways that fitted differences in school mix. Staff relationships at Tui College were much more egalitarian and the staff more unified than at the middle class schools. Arguably, it was the students at Tui College who levelled and unified the staff. For in this school, the real day-to-day pressures came from below, from coping with problems presented by students. Most staff found their daily work a struggle and appeared to value each others' support. Moreover, teaching at Tui College was often a case of searching for solutions in a way that meant staff energies were valued irrespective of individual personalities.

At the middle class schools on the other hand, student pressures were not as great and staff were not unified to the same extent. Staff in these schools seemed under more pressure from above, with staff relationships more hierarchical and junior staff having to 'know their place'. It was easier for the teaching and management

staff to feel more competent because teaching was less pressured and students were more successful. It was therefore easier at these schools to believe in a simple distinction between 'good' and 'bad' teachers. For instance, none of the senior staff at the middle class schools saw teaching at their schools as difficult whereas at Tui College difficulties were freely admitted.

Leadership and governance

Although management was not easy in any of the schools, Tui College senior staff were under a lot more pressure than was the case in the middle class schools. Much of the difference was caused by the nature of their student intakes. Pressures came from the kinds of instructional, pastoral and organisational issues already mentioned. They meant that a more 'hands on' approach by the Tui College Principal was often necessary:

> Principal: The proportions of time I spend on things vary because you can be sailing along and suddenly get hit by a crisis that can absorb days of work for the senior admin. The AP and DP pick up most of that but there are times when I realise that the people pressure, the kid pressure, needs to be spread a bit so I pick up the basic pupil stuff.

There were also other less direct management problems generated by the intake. One of these was staffing. Tui College typically received about half the number of applicants for vacancies of the middle class schools. Moreover, there was a difficulty in attracting good applicants. During 1994 (when teachers were not yet nationally in short supply) the Principal was forced to make five new appointments temporary rather than permanent because the school was not able to attract suitable applicants. On the other hand, staff turnover rates were similar among the schools.

A related problem was monitoring staff performance. While all the principals saw this as part of their job and all had started competency procedures with some staff, the senior staff of Tui College were limited in what they could do if teachers were not performing well. They were limited in the time they could spend on competency procedures and often struggled to find good applicants in any case. This meant that although it is likely that the students in this school provided their own sorting mechanism so that teachers having difficulty voluntarily moved on, some inadequate teachers continued to teach. Senior staff at Tui College often knew of the difficulties these teachers were having but argued that such teachers could be valuable in other ways.

A third problem was trying to market a school which was unpopular with middle class families. A survey of families in the area (Waslander *et al.*, 1994) revealed that middle class parents in the Tui College area were not intending to send their children to this school. The result was that the marketing efforts of the school got little response from this group - the school's information night was almost unattended. This lack of middle class interest contributed to a declining roll, yet another problem for school management. Redundancy procedures had to be invoked each year for several consecutive years. This not only lowered staff morale but inevitably led to staff having to teach subjects in which they were not

well qualified. By comparison, the middle class schools didn't face these difficulties: their middle class enrolments were either stable or growing.

Motivating staff and students was much more difficult at Tui College than at the other schools. The Tui College principal did what he could by celebrating value-added achievements and ignoring 'negatives'. These strategies could only be partially effective however. For instance newsletters to parents were positive but necessarily circumspect. By comparison, it was much easier to motivate people at the middle class schools. There were more successes to celebrate and fewer problems. Newsletters to parents at the middle class schools extolled their students many achievements; they were powerful 'good news machines'.

A fifth problem was the management of externally-driven curriculum and assessment reforms. At Tui College, problems related to the intake were always more pressing than demands from central agencies. The middle class schools, with less student pressure, were able to give more extensive time and thought to implementing reforms. A good example of this was the development of accreditation documents to allow schools to become registered with the New Zealand Qualifications Authority.[4] At the middle class schools this was a relatively leisurely process over 1994, involving consultation with many staff. At Tui College, on the other hand, excessive term-time pressures led the Principal to put off developing most of the accreditation documents until he spent a week on this task during his summer holidays. Not only did the middle class schools have longer to consider reforms, those they were implementing were less urgent because their schools were seen to be working well in terms of producing academic results.

In Gordon's Christchurch study (Gordon *et al.*, 1994), principals and Boards of Trustees of middle class schools appeared to have more influence and confidence in dealing with government agencies than those of less august schools. The same was true in Wellington. Tui College's Board of Trustees lacked the professional expertise and business contacts of the others and was very dependent on guidance from its Principal.

Tui College did get a little more government funding on equity grounds than the middle class schools (a grant of $1135 per student over the 1993 financial year compared to between $717 and $905 at the middle class schools). On the other hand it was not able to collect much income from its local community (only $70 per student over the 1993 financial year compared with between $364 and $908 at the middle class schools). The middle class schools raised much more local money from fundraising events and were also better able to attract foreign fee paying students and business sponsorships. Raffles, entertainment evenings and phone company and supermarket sponsorships all advantaged the middle class schools because parents there had greater discretionary incomes.

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[4] The NZQA is the government agency responsible for setting up and implementing a standards-based national qualifications 'framework'. The accreditation process involved schools, as 'providers' of qualifications, documenting ways in which they have in place suitable systems for managing the quality of assessment.

In sum there appeared to be numerous organisational and management mechanisms which might explain a school mix effect. Day-to-day routines were clearly much more difficult to carry out efficiently at Tui College. This school also had a much larger 'social welfare' role than the middle class schools, and it was less well resourced in financial, material or staffing terms. Organising and managing a school like Tui College presented huge challenges for its teachers and senior management team.

UNDERSTANDING THE IMPACT OF SCHOOL MIX

The preceding discussion has suggested numerous differences in school processes which might plausibly explain a school mix effect. It is hard to see how years of exposure to working class reference groups, to less challenging and less engaged classrooms and to a less smooth running and less disciplined school environment would not lead to reduced achievement at low SES schools. It should also be noted that the intake differences among the Wellington schools were not as wide as those which exist among all New Zealand schools. Had even higher and lower SES schools been included in the study, differences in school processes may have been more marked.

There are clear parallels here with process differences reported by qualitative researchers in other countries who, while investigating somewhat different questions, have also compared schools of differing social class mix. They include research in the US by Anyon (1981), Lareau (1989) and Metz (1990) as well as Connell *et al.'s* (1982) Australian study *Making the Difference*. Metz, for instance, reaches a very similar conclusion:

> For both individual students and individual teachers, the experience of life in schools and the effectiveness of their academic efforts is deeply affected by the social class of the school in which they happen to find themselves.... Neither a student nor a teacher would emerge from 4 years at any of the schools with similar experiences, skills or attitudes. If these schools are at all typical, it is clear that teachers as well as students will have much more difficulty in developing their academic abilities at the lower SES schools, and that teachers and students of moderate ability will be helped to flourish in at least some directions in schools of higher SES (1990, p.103)

A school mix effect seems best understood as the *cumulative* outcome of numerous reference group, instructional, organisational and management differences which are related in turn to school intake characteristics. The idea of a school mix effect resulting from so many smaller effects helps to explain why it may have remained relatively invisible to quantitative and qualitative researchers alike. Considered individually, these differences often seem of minor importance. It is their cumulative and probably compounding effect that may generate a more powerful influence on student achievement than they individually seem to warrant. In a sense this argument comes close to Rutter's use of the notion of 'ethos' where he and his colleagues argue that 'the *cumulative* (his emphasis) effect of these various social factors was considerably greater than the effect of any of the individual factors on their own' (Rutter *et al.*, 1979, p. 179). However whereas in Rutter's analysis the notion of 'ethos' or

'climate' is disconnected from the social class context of the school, the Wellington study points explicitly to two reasons *why* school processes could reflect school mix.

One has to do with disparities in material and staffing resources. These are often cited as a cause of inequalities between schools yet in the Wellington study, they were not dramatic enough alone to explain differences between the schools. They were nowhere near as inequitable, for example, as the US picture painted in *Savage Inequalities* (Kozol, 1991). While Tui College collected lower funding from non-government sources, the school was similarly resourced in terms of 'basics' such as buildings and textbook allocations. Financial disparities were mainly making a difference at the level of 'extras' such as computers and musical instruments. Similarly, the staffing ratios at the schools were not very different.

Rather, the study suggests that a more powerful explanation for a school mix effect revolves around the *negotiation* of school processes. Many of the process differences noted above are best seen as issues of power, with the power relations between different social classes within a school being of central importance. This is because in a predominantly middle class school, the struggles of working class families and students are marginalised and may have relatively little effect on student culture or instructional and organisational policies and practices. As a middle class school gains more working class students however, it can be predicted that the processes of the school will shift, despite resistance from middle class teachers and students, towards the culture of the increasingly dominant working class group. Once a school becomes predominantly working class, its ability to reproduce middle class culture may no longer be taken for granted, particularly once it can no longer attract 'academic' teachers or teach an 'academic' curriculum.

To theorise the causes of a school mix effect more generally we need to look to the organic or inter-connected relationship between schools and middle class rather than working class families (Bourdieu and Passeron, 1977). To explain a school mix effect, these middle class-organic, working class-inorganic relations between home and school need to be seen played out at the school as well as individual level. Schools develop processes which reflect their SES mix. Solidly middle class schools have strongly supportive student cultures which allow them to teach an academic, examination based curriculum and organise themselves relatively smoothly. Working class schools will, in general, be quite the opposite. Consequently working class students who attend working class schools may often fail to gain academic qualifications not only because of their own background, but also because they are attending schools which cannot offer middle class types of school resources and processes necessary for academic success. Conversely working class students who attend a middle class school are more likely to succeed because they are exposed, despite their individual class backgrounds, to the contextual benefits of a middle class school mix.

The idea of middle class/organic, working class/inorganic relationships may also be specifically linked to the classroom through the *negotiated curriculum*. Negotiation is a term that has often been used by symbolic interactionalists such as Delamont (1983) and Woods (1979). Curriculum theorists have also begun to

study the ways in which curriculum and pedagogy are 'embedded' in the events that students and teachers jointly construct in classes (see Doyle, 1992 for a summary). However, while research in both of these fields can be useful, the notion of negotiation can be linked more explicitly to the social class characteristics of students. Following Jones (1991), I have argued that what is taught and how it is presented must be negotiated with students on the basis of class-related levels of 'ability' and compliance. These in turn will be related to students' views of schooling and their likely occupational futures. As Metz (1990, p.99) puts it:

> Teaching is an interactive endeavour; it requires making connection with students. If their attitudes and skills vary substantially, so must the content and style of teachers' work with them. Accordingly the very nature of teachers' work varies with their students and so with the social class of the communities from which students come, even when teachers' own training or initial skills are similar.

Another issue to consider is whether the effect is likely to be universally optimal or working class preferential. Although the Wellington study was not able to examine the effects of school mix on middle class individuals, the evidence points to a school mix effect being a zero sum game as Willms (1985) and Heath and Blakey (1992) suggest, rather than universally optimal. This is because it is difficult to see why middle class students would not be affected by many of the processes discussed here in a similar way to working class students. Arguably, middle class students who attend working class schools will also be subjected to processes that will be less beneficial in terms of academic outcomes than those who attend middle class schools.

It is feasible, as Lauder and Hughes (1990) argue, that because of their cultural capital middle class students will not 'lose' by being schooled in a working class setting to the same extent as working class students will 'gain' by being schooled in a middle class setting. However this is quite another thing to argue that balancing school mix can benefit all students. This study implies that policies which set out to address school mix in order to benefit low SES families will inevitably involve some cost in terms of middle class advantage. The question of school mix is, therefore, at heart a political and moral issue of power sharing, rather than simply a 'win-win' solution to inequality. This point raises broader questions of the purposes of schooling: should it consist of more than an unequal competition to gain the highest qualifications? Fundamental issues of curricular justice are at stake (Connell, 1994).

Another matter raised by the Wellington study is the extent to which a school mix effect might be modified by within-school segregation such as banding or streaming. The partial banding at Victoria College appeared to have less effect on *reference group* processes than might be expected on the basis of 'differentiation-polarisation' studies (Hargreaves, 1967; Lacey, 1970). There was little evidence that the ordinary kids or their friends were strongly defining themselves in relationship to students in high band classes. The approaches of their classes were overwhelmingly normative or instrumental rather than alienated. Thus there was no evidence of an anti-school subculture developing as a result of the partial

banding although this may (Kealey, 1984) or may not (Jones, 1991) have occurred had the school been fully banded or streamed. Rather, for the most part the 'bandies' (students in high band classes) were 'out of sight and out of mind'.

Banding did however seem to have some effect on *instructional* processes within Victoria College although not as much as the effects of school mix. On the one hand there was some evidence that teachers at Victoria College did teach low band classes a less demanding curriculum than high band classes. On the other hand, and more importantly for the purposes of this thesis, the engagement and difficulty of the low band Victoria College classes were similar to those at Wakefield and Plimmer colleges (the other middle class, but 'mixed ability' schools in the study), and considerably different from the Tui College classes. The likely reason for this was that the Victoria College low band classes, despite having 'more able' students skimmed off, were nevertheless still dominated by middle class students because of the largely middle class nature of the school.

The evidence from Victoria College therefore suggests that school mix may have a significant effect despite within-school differentiation, and helps to explain why Lauder and Hughes (1990) found a school mix effect even when many of their schools were banded. It appears that what may be more important than whether a student is in a streamed, banded or mixed ability class is the SES characteristics of that class. A student in a low stream in a high SES school may still benefit more from having higher SES classmates and friends and more demanding instructional processes than a similar student in a low SES but unstreamed school. However the particular nature of grouping will probably be important in determining its effect. Victoria College was, after all, only partially banded and its bands were also all taught a similar curriculum albeit at different levels of difficulty.[5]

The conclusion that a school mix effect could be significant despite grouping should not, however, be seen as an argument for within-school differentiation. Rather I am arguing the need to see within-school practices in the deeper and more decisive context of differences among schools. The numerous studies over the last two decades of the effects of within-school differentiation on student achievement (Oakes *et al.*, 1992) need to be joined by more studies which simultaneously examine the effects of differentiation within *and* among schools.

IMPLICATIONS FOR RESEARCH AND POLICY

The Wellington study has implications for school effectiveness research, for the likely outcomes of educational markets and for the kind of interventions necessary to create more equitable schooling provision. These are discussed in more detail elsewhere (Thrupp, 1996) and are only noted briefly here.

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[5] There was not the relatively overt vocational/academic curricula division often found between high and low tracks in the USA.

School effectiveness research

This study has suggested teachers and school leaders can make *some* difference through their policies and practices. Among the middle class schools, Victoria and Wakefield colleges could be seen as schools with 'pushing' policies that were maximising their ability to make a difference over mix, whereas Plimmer College appeared to be resting largely on the characteristics of its mostly 'able' and compliant students. It seems likely that where a school has 'pushing' policies, the effects of mix on achievement will be somewhat diminished. Where this is not the case, it will be somewhat larger.

Nevertheless, the study has pointed to school processes being fundamentally bounded by the socio-economic mix of a school and the power relations and resources that mix generates. This was indicated by the similarity of policies and practices of the middle class schools when compared to their differences to Tui College. It was also shown by the analysis of student engagement and academic difficulty across the schools which indicated that while there was variation within all the schools, the middle class schools generally had more highly engaged and academically challenging classes. A consistently useful idea has been that of *critical mass*. It is likely that the promotion of many 'successful' school characteristics will only become feasible with a reasonable proportion of middle class students. If this is the case, then there will be limits to which working class schools could promote the 'successful' school characteristics of middle class schools.

These findings clearly have important implications for understanding and evaluating school effectiveness. They suggest that while many factors that have been identified as contributing to achievement may indeed be school *based*, they are nonetheless not school *caused*. They relate to family background and therefore are not easily modified by the kinds of recipes for success that effective schools proponents typically advocate. For instance, Ramsay and Hall (1994) identify 'very strong valuing of learning outcomes judged in terms of the content of the learning which is seen as being consistent with the discipline knowledge' as a feature of more effective schools, while less effective schools are seen to have 'much greater emphasis on skills with little extension work and content is seen as being of secondary importance'. However in terms of the findings of this study, what Ramsay and Hall identify as a feature of effectiveness could clearly also be viewed as related to school mix. In a similar way, it is likely that none of the usual correlates favoured by effective schools proponents - such as the nature of the school environment, the amount of time on-task, the nature of tasks, the level of staff expectations, the style of leadership, or the degree of parental involvement in a school - should be seen independently of the influence of school mix.

The outcomes of educational markets

The Wellington study also speaks to the fortunes of schools in educational markets. Neo-liberals directly link the popularity of schools to their performance. Teachers and principals of unpopular schools are held accountable for the spiral of decline because they have not improved their schools sufficiently to boost their

reputation and hence the size of their student intakes. The eventual failure of some schools can therefore be seen simply as the price to be paid for a quality education system. Chubb and Moe (1990) are more frank than most about this 'natural selection' agenda:

> Schools that fail to satisfy a sufficiently large clientele will go out of business. ... Of the schools that survive, those that do a better job of satisfying consumers will be more likely to prosper and proliferate (p. 33).

However, in conjunction with the observation that schools in decline in the marketplace are invariably those with low SES intakes (Ainsworth *et al.*, 1993; Waslander and Thrupp, 1994; Wylie, 1994) the findings of the Wellington study clearly challenge the neo-liberal account of the failure of schools. They imply that teachers and principals at low SES schools like Tui College may be unable to deliver similar academic programmes as middle class schools in any case. Indeed, the study suggests that low SES schools are not so much ineffective as *overwhelmed*, a situation which will demand quite different policy responses to those suggested by neo-liberals.

Many studies have already indicated that school self-management, the means by which schools are expected to respond to the market, is also more difficult in working class schools than middle class schools (Bowe *et al.*, 1992; Gerwitz *et al.*, 1995; Gordon *et al.*, 1994, Hannaway, 1995; Wylie, 1994). This was further illustrated by many aspects of the Wellington study. Not only did the Board and senior staff of Tui College nave fewer resources at their disposal, they were so busy dealing with internal problems stemming from the school's intake that time and energy to respond to the reforming demands of external agencies were limited. The significance of school mix to debates over the outcomes of self-management is that it helps to explain why intake-related pressures may be so intense in predominantly working class schools that self-management will be very difficult without substantial additional resourcing.

Finally, as noted earlier, many researchers have suggested that market policies will further polarise the intakes to schools along socio-economic lines. It is already clear that some schools have become 'sink schools' as a result of white and middle class flight following the introduction of 'choice' (Waslander and Thrupp 1995, Gerwitz *et al.*, 1995). In these schools - and perhaps in others if general polarisation does intensify over time - academic achievement of students may be predicted to deteriorate as a result of the kinds of process differences noted in this study. Conversely, at the other end of the market, mean levels of attainment in schools which are able to attract higher SES students will probably rise.

The need for better interventions

In the light of the previous discussion, the neo-liberal 'solution' of shutting down low SES schools in decline or (more often) allowing them to wither and die slowly appears to be a case of punishing the victim. What is needed instead are fairer and more constructive interventions. These could include substantially

increasing the resources available to low SES schools; state intervention in school markets; and developing more balanced approaches to school accountability.

Providing substantial extra resources to low SES schools would be a useful measure which would not threaten middle class interests so directly as policies directed towards balancing the social mix of schools. Yet it is commonly argued by neo-liberals that giving more resources to low SES schools is not the answer. For instance, Chubb and Moe (1990, p. 194) argue:

> In our view the performance problems of the public schools have little or nothing to do with inadequate funding and they cannot be corrected by digging deeper into the public purse.

However Kozol (1991) rightly points out that many of those who make this claim send their own children to highly resourced schools. His account and this one make it difficult to see how considerably lower student-teacher ratios along with more guidance and management staff and funding could not make some difference to the achievement of students in low SES school settings such as Tui College, particularly if efforts were made to ensure that teachers moved freely between working class and middle class schools. This would at least give students the opportunity to be taught by staff who have retained familiarity with teaching an academic exam-oriented curriculum, although it would admittedly do little to resolve fundamental tensions between working class students and this kind of curriculum.

Although providing more resources to low socio-economic schools would go some way towards reducing the pressures these schools presently face by virtue of their current intakes, it would be at best a partial measure. This is because the negotiated nature of school processes makes it likely that, regardless of resourcing, some of the advantageous processes of the middle class schools would be impossible to replicate in working class schools without actually changing the mix of the schools. These include reference group processes and the richer environment of classroom questioning and discussion generated within middle class classrooms.

Therefore some intervention to reduce the SES segregation of school intakes is also a necessary measure to improve the overall standard of schooling. This would have the effect of both sharing the problems of poverty more evenly around schools and moving middle class cultural and economic resources into (presently) low SES schools. However the question of how best to intervene in school markets to prevent inequality is a complex one (Adler, 1993; Gerwitz *et al.*, 1995; Lauder *et al.*, 1995; OECD, 1994; Walford, 1994) Policies which could overcome middle class resistance would require a strong commitment to state intervention in education on the grounds of equity. The problem is that such commitment is unlikely from neo-liberal governments which are hostile to equity measures. As Evetts (1995, p. 235) notes, '(t)hose who are supporting and promoting choice polices to augment choice are simply not interested in equity as a goal or benchmark in education'.

Along with providing extra resources to working class schools and intervening in educational markets, the Wellington study suggests that governments also need to take a more balanced policy approach to assessing the performance of schools and making them accountable than is typical at present. For, even when students' individual characteristics are taken into account in a value-added analysis, schools should still not be expected to perform at the same level unless the effects of their group characteristics are also taken into account. Rather, good policy will acknowledge that schools can be more or less effective, but also be realistic about ways in which the nature of intakes create important constraints and possibilities for teachers and administrators.

To assist the development of such policy, research is needed to ascertain what is possible for schools within the boundaries set by particular school mixes. This would allow teachers, administrators and policy makers to gain a more realistic, contextualised view of what the goals should be and where performance might be lifted. Yet, once again, in the neo-liberal politics of our times, when some policy makers appear reluctant to even move away from the use of raw exam results (Ball, 1993) or to acknowledge the constraints that teachers in general face in their classrooms (Sirotnik, 1988), the chances of differential constraints related to school mix being taken into account seem slim. For in most respects, the idea that teachers are heavily influenced by student characteristics is disadvantageous to neo-liberal governments. This is because to acknowledge that school processes may have to be negotiated raises the difficult prospect that technical solutions to raise effectiveness and efficiency may not alone provide the answer to problems faced by schools. It also means that schools can not be so easily held accountable for their success or failure in the educational marketplace.

CONCLUSION: THE POSSIBILITIES OF SCHOOL MIX

Addressing the effects of school mix effect should be part of the policy agenda for reducing educational inequality. This is because there is every indication that measures to resource working class schools, reduce SES segregation among schools and develop more realistic and fairer ways of assessing school performance could help to improve the school outcomes and life chances of many working class students, albeit within the constraints of the present schooling system.

The Wellington study has also highlighted another way in which middle class families, wittingly or unwittingly, gain advantage in education at the expense of the poor. In pointing to the unfairness of neo-liberal approaches to school effectiveness and accountability and to the likely impact of market policies on school processes and student outcomes, it provides further evidence for the market as a class strategy (Ball, 1993). It calls once again for political urgency around the concerns of low SES schools and the students they serve.

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